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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,814	03/12/2004	Bruce Wayne Flint	EL029BF-1	8378

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EXAMINER	
JOLLEY, KIRSTEN	
ART UNIT	**PAPER NUMBER**
1762	

DATE MAILED: 06/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/799,814	FLINT ET AL.	
	Examiner	Art Unit	
	Kirsten C. Jolley	1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-14 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-14 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 8/19/04.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Jung et al. (US 2004/0022950).

Jung et al. discloses a method for evaluating a coating upon a metal surface comprising: forming a silica-containing film upon a metal surface (paragraph [0050]); exposing the silica-containing film to a copper sulfate solution that interacts with the silica containing film; and determining the effectiveness of the silica-containing coating film by reaction of zinc with the copper sulfate resulting in a reddish-brown to black colored reaction surface that forms on flaws in the organic coating (paragraph [0344]).

3. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Heimann et al. (US 6,149,794).

Heimann et al. discloses a method for evaluating a coating upon a metal surface comprising: forming a silica-containing film upon a metal surface (col. 5, lines 40-58);

exposing the silica-containing film to a salt spray solution that interacts with the silica-containing film (col. 5, lines 59-61); and determining the effectiveness of the silica-containing film or layer (col. 6, lines 5-22).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-10 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 2368914 A in view of Heimann et al. (US 6,149,794).

GB '914 discloses a method of testing the rate of corrosion of a coated metal sheet comprising: providing a coated metal surface; contacting the coated metallic surface with an acidic source wherein at least a portion of the metallic surface is dissolved by the acidic source; and measuring the concentration of metal leached into the acidic source. GB '914 is particularly directed to metal sheet materials, preferably galvanized sheet steels, provided with organic coatings (page 3, first paragraph). GB '914 lacks a teaching of testing metallic substrates having a silica-containing coating layer thereon. Heimann et al. discloses the conventionality of coating metallic substrates, particularly galvanized substrates, with silica-containing coatings thereon. Heimann et al. additionally teaches use of silica- and polymer-containing coatings on metallic substrates (col. 4, line 23 to col. 5, line 20). It is the Examiner's position that it would have been obvious to one having ordinary skill in the art, upon seeing the teachings of

GB '914 and Heimann et al. in combination, to have used the corrosion rate testing method of GB '914 on metallic substrates coated with silica-containing coatings, and particularly silica- and polymer-containing coatings, with the expectation of successful results since GB '914 is not limited as to coatings with which it is useful and because the references are similarly directed to coatings for metallic substrates. The test of obviousness is not express suggestion of the claimed invention in any or all references but rather what the references taken collectively would suggest to those of ordinary skill in the art presumed to be familiar with them. *In re Rosselet*, 347 F.2d 847, 146 USPQ 183 (CCPA 1965); *In re Hedges*, 783 F.2d 1038.

As to claims 4-5, both GB '914 and Heimann et al. teach use on zinc.

As to claims 6-7, while GB '914 does not disclose use of the claimed acids, however GB '914 states "the method of the invention may be conducted in a range of appropriate weathering regimes, which enables good prediction of performance of environmentally sensitive materials in those same or similar regimes" (page 4, first paragraph). The Examiner notes that nitric acid is a known product of acid rain. It is the Examiner's position that it would have been obvious to an engineer skilled in the art to have used nitric acid as a testing medium since it is a chemical typically contacted by coated metal left outdoors and also because nitric acid is a known chemical that corrodes metals therefore protection is desired against it.

As to claims 8-10, Heimann et al. teaches that its silica-containing coating may be applied prior to coating application, e.g., E-Coat (col. 5, lines 4-9). It would have been obvious for an ordinary artisan to have applied further organic coatings on Heimann et

al.'s silica-containing coating, including epoxy coating, since these are well known overcoatings.

As to claim 12, it would have been obvious to have used a testing apparatus that retains the metal surface in a predetermined location and permits fluid contact in order to obtain the most reliable test results.

As to claim 14, GB '914 teaches measuring the concentration of metal by using atomic absorption (page 9, first paragraph).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Henry (US 3,625,776) and WO 03/073073 A2 are cited to demonstrate the relevant prior art.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kirsten C. Jolley whose telephone number is 571-272-1421. The examiner can normally be reached on Monday to Wednesday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kirsten C Jolley
Primary Examiner
Art Unit 1762

kcj